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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,943	07/26/2000	Choon-Keun Song	P2023	8354

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EXAMINER

RYMAN, DANIEL J

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/625,943

Applicant(s)

SONG, CHOON-KEUN

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: ref. 206, 215, 217, 223, 225, and 229 (see page 6, line 19-page 8, line 13 and Fig. 2). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 2 recites the limitation "the memory and address for each data input/output" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. For the purposes of prior art rejections, Examiner will interpret "the memory and address for each data input/output" to be "a memory and address for each data input/output".

5. Claim 2 recites the limitation "the intra-junctor" in line 4. There is insufficient antecedent basis for this limitation in the claim. For the purposes of prior art rejections, Examiner will interpret "the intra-junctor" to be "an intra-junctor".

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jotwani (USPN 4,621,358).

8. Regarding claim 1, Jotwani discloses a method for processing a large amount of intra-calls in a remote control system of a full electronic exchange system (col. 3, lines 3-30) of the type having a time switch block (time slot interchange, TSI) with a voice memory device and a control memory device to switch the Pulse Code Modulation (PCM) data to the intra-direction (col. 6, line 19-col. 7, line 10 and col. 7, line 47-col. 8, line 40), and a call pass controller for transferring said PCM data to a host system and for looping said PCM data to an intra-direction (col. 6, line 19-col. 7, line 10 and col. 7, line 47-col. 8, line 40), comprising the steps of: writing call direction data for designating said intra-call direction into the data region of said control memory device (LGH, TSI, and PGHI RAMS) to switch said PCM data sequentially stored in said voice memory device to said intra-direction (col. 1, lines 44-61; col. 4, lines 17-35; col. 6, lines 19-64; col. 7, line 47-col. 8, line 25; and col. 12, lines 13-23); and, looping entire channels to said intra-direction to switch said PCM data from said time switch block to said intra-direction

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(col. 6, line 19-col. 7, line 10 and col. 7, line 47-col. 8, line 40) if said call direction data designates said intra-call direction (col. 1, lines 44-61; col. 4, lines 17-35; col. 6, lines 19-64; col. 7, line 47-col. 8, line 25; and col. 12, lines 13-23). Jotwani does not expressly disclose that the call direction data designates the intra-call direction based on the amount of said intra-calls; however, Jotwani does disclose that intra-nodal switching (intra-call direction) frees communication channels over the communications link for calls that are not intra-calls (col. 2, lines 52-68 and col. 3, lines 22-30). It is implicit that the largest gains from intra-nodal switching will come when there is a large amount of intra-calls since a large amount of intra-nodal switched calls frees a large amount of communication channels over the communications link. Jotwani also discloses that intra-nodal switching requires processing that is different than processing for non-intra-nodal switching (col. 10, lines 39-61 and col. 11, line 22-col. 13, line 13). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the call direction data designate the intra-call direction based on the amount of said intra-calls in order to have the system use intra-nodal switching when the benefits of intra-nodal switching warrant separate processing for the intra-calls.

9. Regarding claim 2, referring to claim 1, Jotwani discloses that the step of writing call direction data further includes the step of writing data to select a memory and address for each data input/output (col. 1, lines 44-48; col. 4, lines 17-35; col. 6, lines 19-64; col. 7, line 47-col. 8, line 25; and col. 12, lines 13-23).

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jotwani (USPN 4,621,358) as applied to claim 2 above, and further in view of Gray (USPN 5,164,940).

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11. Regarding claim 3, referring to claim 2, Jotwani implicitly discloses that the step of writing call direction data further includes the step of writing data to select the kind of input/output memory (col. 1, lines 44-48; col. 4, lines 17-35; col. 6, lines 19-64; col. 7, line 47-col. 8, line 25; and col. 10, line 62-col. 11, line 10; and col. 12, lines 13-23), the number of the sub-highway inputted/outputted through the intra junctor (line group) (col. 1, lines 44-48; col. 4, lines 17-35; col. 6, lines 19-64; col. 7, line 47-col. 8, line 25; and col. 12, lines 13-23), and number of the channel inputted/outputted through said intra junctor (col. 1, lines 44-48; col. 4, lines 17-35; col. 6, line 19-col. 7, line 10; col. 7, line 47-col. 8, line 25; and col. 12, lines 13-23). Jotwani does not expressly disclose writing data to select the capacity of the input/output time slot; however, Jotwani does disclose that writing data specifies a variety of characteristics (col. 1, lines 44-48; col. 4, lines 17-35; col. 6, lines 19-64; col. 7, line 47-col. 8, line 25; and col. 10, line 62-col. 11, line 10; and col. 12, lines 13-23). Jotwani also discloses that it would be obvious to modify the system (col. 13, lines 28-37). Gray teaches, as prior art, that it is well known to connect high capacity and low capacity lines utilizing time division switching (col. 1, lines 11-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to write data to select the capacity of the input/output time slot in order to ensure that the amount of data switched to the line does not exceed the rate of the line.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (703)305-6970. The examiner can normally be reached on Mon.-Fri. 7:00-5:00 with every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703)308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703)308-6743.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Daniel J. Ryman
Examiner
Art Unit 2665

DJR
Daniel J. Ryman



HUY D. VU
SUPERVISORY PATENT EXAMINER
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